IN THE CLAIMS:

1. (Original) A mixture of at least two compounds each having at least two double bonds, said mixture having a WFR from 240 to 600 g/mol of double bond and at least two of said compounds each comprising at least two (meth)acrylic esters as double bond component, WFR being given by:

$$\sum_{i=1}^{n} \alpha_i \times MW_i/Z_i = WFR \text{ where}$$

$$\sum_{i=1}^{n} \alpha_i = 1$$

α_i is equal to the molar fraction of compound (i) in said mixture, n is equal to the number of compounds in said mixture and n is $\geq$ 2, Z_i is equal to the number of double bonds in said compound (i), MW_i is equal to the molecular weight of said compound (i).

2. (Currently amended) The mixture ~~according to~~ of claim 1 ~~which has~~ having a WFR between 240 and 400 g/mol of double bond ~~and preferably a WFR between 250 and 350 g/mol of double bond~~.

3. (Currently amended) The mixture ~~according to either~~ of ~~claims~~ claim 1 ~~and 2~~ wherein n is 2, 3, or 4 ~~preferably 2~~.

4. (Currently amended) The mixture ~~according to any~~ of ~~claims~~ claim 1 ~~to 3~~ wherein the MW/Z ratios of two compounds differ ~~at least~~ by at least 50 g/mol of double bond~~, preferably by at least 100 g/mol of double bond and more preferably by at least 250 g/mol of double bond~~.

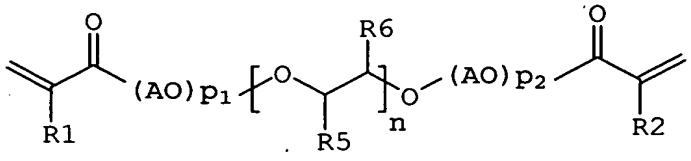
5. (Currently amended) The mixture ~~according to any~~ of ~~claims~~ claim 1 ~~to 4~~ wherein one compound has an MW/Z ratio of below 400 g/mol of double bond,~~preferably below 300 g/mol of double bond, more preferably below 200 g/mol of double bond and especially below 150 g/mol of double bond~~.

6. (Currently amended) The mixture ~~according to any~~ of ~~claims~~ claim 1 ~~to 5~~ wherein one compound has an MW/Z ratio of above 400 g/mol of double bond and below 10 000 g/mol of double bond ~~and preferably of above 600 g/mol of double bond and below 1000 g/mol of double bond~~.

7. (Currently amended) The mixture ~~according to any~~ of ~~claims~~ claim 1 ~~to 6~~ wherein Z of at least one compound is between 2 and 6 ~~and preferably is 2, 3 or 4~~.

8. (Currently amended) The mixture ~~according to any~~ of ~~claims~~ claim 1 ~~to 7~~ wherein said compounds are esters F_i which are obtainable by esterification of polyalcohols A_i with (meth)acrylic acid and each polyalcohol A_i has Z_i hydroxyl functions and from 2 to 50 carbon atoms.

9. (Currently amended) The mixture ~~according to any~~ of ~~claims~~ claim 1 ~~to 8~~ wherein one compound is represented by one of the following formulae:



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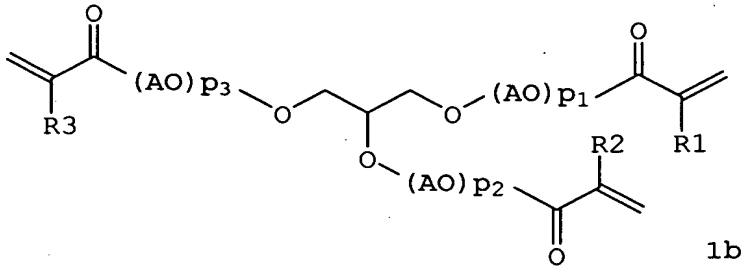

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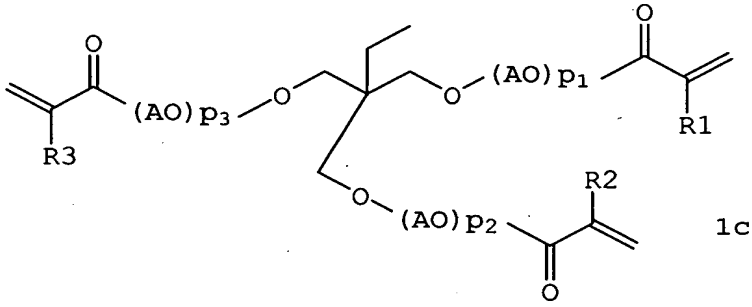

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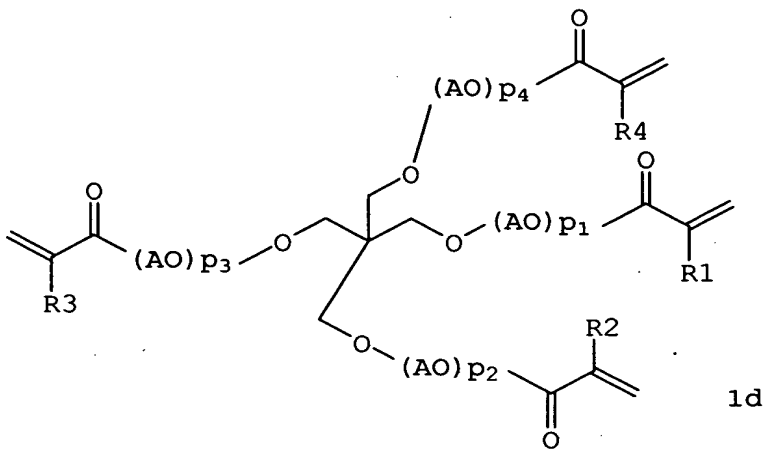
, or



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~~where~~ wherein AO is independently at each instance -O-CHR7-CHR8- or -CHR7-CHR8-O- ~~where~~ wherein R7 and R8 are independently H, linear or branched C1-C8-alkyl,

R5 and R6 are independently H, linear or branched C1-C8-alkyl,

n is 1, 2, or 3,

p1 is 0, 1, or 2,

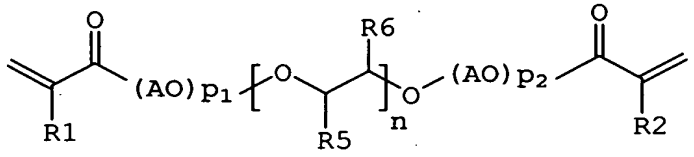
p2 is 0, 1, or 2,

p3 is 0, 1, or 2,

p4 is 0, 1, or 2, and

R1, R2, R3, R4 are independently H or CH3,~~—~~.

10. (Currently amended) The mixture ~~according to any~~ of ~~claims~~ claim 1 ~~to 9~~ wherein one compound is represented by one of the following formulae:



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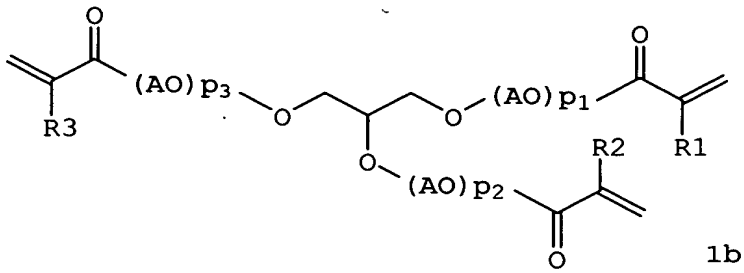

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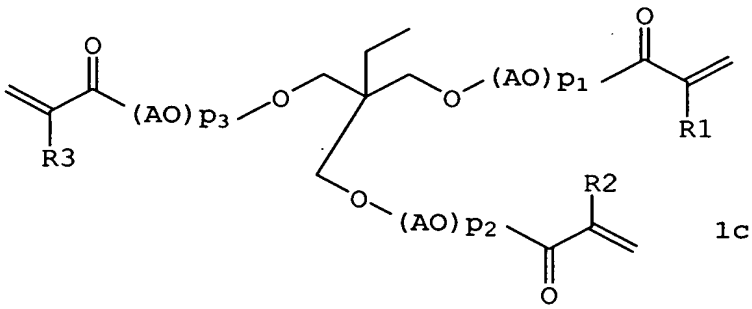

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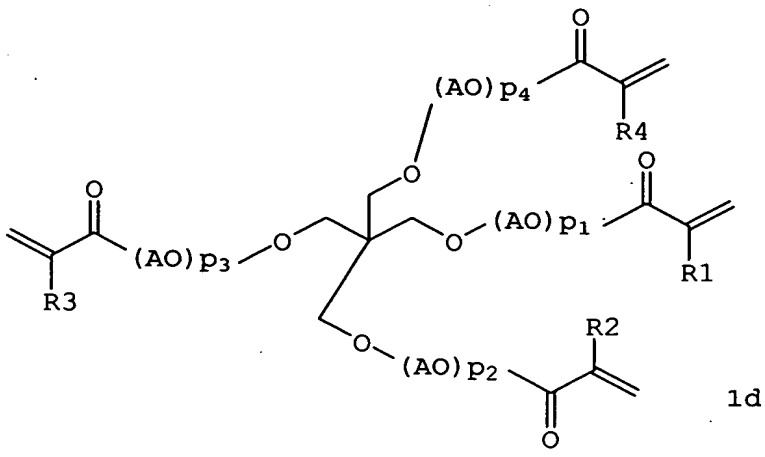
, or



1d

~~where~~ wherein AO is independently at each instance -O-CHR7-CHR8- or -CHR7-CHR8-O-, ~~where~~ wherein R7 and R8 are independently H, linear or branched C1-C8-alkyl,

R5 and R6 are independently H, linear or branched C1-C8-alkyl,

n is 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, or 20,

p1 is 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, or 20,

p2 is 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, or 20,

p3 is 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, or 20,

p4 is 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, or 20, and

R1, R2, R3, R4 are independently H or CH3.

11. (Currently amended) The mixture ~~according to either~~ of ~~claims~~ claim 9 ~~and 10~~ wherein AO is independently at each instance EO or PO,

~~where~~ wherein EO is O-CH2-CH2-,

PO is independently O-CH2-CH(CH3)- or O-CH(CH3)-CH2-

R5 and R6 are independently H or CH3.

12. (Currently amended) A process for preparing an ester mixture of said esters F_i ~~according to any~~ of ~~claims 1 to 11~~ claim 8 by starting from an alcohol mixture of ~~said~~ polyalcohols A_i, comprising the steps of

a) reacting said polyalcohols A_i with (meth)acrylic acid in the presence of at least one esterification catalyst C ~~and of~~, at least one polymerization inhibitor D, and optionally ~~also of~~ a water-azeotroping solvent E to form an ester mixture of said esters F_i,

b) optionally removing from the reaction mixture some or all of the water formed in a), during and/or after a),

f) optionally neutralizing said reaction mixture,

h) when a solvent E ~~was~~ is used, optionally removing ~~this~~ the solvent E by distillation, and/or

i) stripping the reaction mixture with a gas which is inert under the reaction conditions.

13. (Currently amended) The process for preparing an ester mixture of said esters F_i[,] ~~said mixture having a WFR from 200 to 600 g/mol of double bond or the process~~ according to claim 12 wherein

~~the~~ a molar excess of (meth)acrylic acid over said polyalcohols A_i is at least $5*Z_i$ mol%,_ and

the optionally neutralized (meth)acrylic acid present in said reaction mixture after the last process step substantially remains in said reaction mixture.

14. (Currently amended) The process for preparing an ester mixture ~~of said esters F_i, said mixture having a WFR from 200 to 600 g/mol of double bond or the process~~ according to ~~either of claims~~ claim 12 ~~and 13~~ wherein the (meth)acrylic acid is not more than 75% by weight removed from said reaction mixture obtained after said last step, which reaction mixture comprises the ester mixture.

15. (Currently amended) The process for preparing an ester mixture ~~of said mixtures F_i, said mixture having a WFR from 200 to 600 g/mol of double bond or the process~~ according to ~~any of claims~~ claim 12 ~~to 14~~ wherein said reaction mixture obtained after said last process step, which comprises the ester mixture, has a DIN EN 3682 acid number of at least 25 mg KOH/g.

16. (Currently amended) The process for preparing an ester mixture ~~of said mixtures F_i, said mixture having a WFR from 200 to 600 g/mol of double bond or the process~~ according to ~~any of claims~~ claim 12 ~~to 15~~ wherein said reaction mixture obtained after said last process step, which comprises the ester mixture, has a (meth)acrylic acid content of at least 0.5% by weight.

17. (Currently amended) The process for preparing an ester mixture ~~of said mixtures F_i, said mixture having a WFR from 200 to 600 g/mol of double bond or the process~~ according to ~~any of claims~~ claim 12 ~~to 16~~ wherein the molar ratio of (meth)acrylic acid to alcohol mixture A_i in reaction step a) is at least $5*Z_i:1$.

18. (Currently amended) A process for preparing a crosslinked hydrogel, comprising the steps of

k) polymerizing an ester mixture of ~~said esters F_i, said mixture having a WFR from 200 to 600 g/mol of double bond or esters F_i according to any of claims~~ claim 1 ~~to 11~~ with (meth)acrylic acid, ~~with~~ optionally with an additional monoethylenically unsaturated ~~compounds~~ compound N, and optionally ~~also~~ at least one further copolymerizable hydrophilic monomer M, in the presence of at least one free-radical initiator K and optionally ~~of~~ at least one ~~further~~ grafting base L,

l) optionally postcrosslinking the reaction mixture obtained from k),

m) drying the reaction mixture obtained from k) or l), and

n) optionally grinding and/or sieving the reaction mixture obtained from k), l), or m).

19. A process for preparing a crosslinked hydrogel, comprising steps a) to i) according to ~~any of claims~~ claim 12 ~~to 17~~ and additionally

k) polymerizing the reaction mixture from one of ~~stages~~ steps a) to i) of claim 12, if performed, ~~with~~ optionally with an additional monoethylenically unsaturated ~~compounds~~ compound N and optionally ~~also~~ at least one further copolymerizable hydrophilic monomer M, in the presence of at least one free-radical initiator K and optionally ~~of~~ at least one grafting base L,

l) optionally postcrosslinking the reaction mixture obtained from k),

m) drying the reaction mixture obtained from k) or l), and

n) optionally grinding and/or sieving the reaction mixture obtained from k), l), or m).

20. (Currently amended) ~~Polymer obtainable~~ A polymer prepared according to ~~a~~ the process ~~according to either~~ of ~~claims~~ claim 18 ~~and 19~~.

21. (Currently amended) ~~Crosslinked~~ A crosslinked hydrogel comprising at least one hydrophilic monomer M is copolymerized from crosslinked with an ester mixture ~~of said esters F_i, said mixture~~ having a WFR from 200 to 600 g/mol of double bond according to ~~any of claims~~ claim 1 ~~to 11~~.

22. (Cancelled)

23. (Cancelled)

24. (Currently amended) A composition ~~of matter~~ comprising

from 0.1% to 40% by weight of at least one ester mixture of ~~said esters F_i, said mixture having a WFR from 200 to 600 g/mol of double bond or esters F_i according to any~~ of ~~claims~~ claim 1 ~~to 11~~ and (meth)-acrylic acid,

0.5-99.9% by weight of at least one hydrophilic monomer M,

0-10% by weight of at least one esterification catalyst C,

0-5% by weight of at least one polymerization inhibitor D, and

0-10% by weight of at least one solvent E,

with a proviso that the sum total is ~~always~~ 100% by weight.

25. (Currently amended) The composition ~~of matter according to~~ of claim 24~~,~~ further comprising

a diluent G ~~ad 100% by weight~~.

26. (Currently amended) ~~Cross-linked~~ A crosslinked hydrogel ~~obtainable~~ prepared from a composition of ~~matter according to~~ claim 24 ~~or 25~~ and additionally

~~l)~~ optionally ~~postcrosslinking the reaction mixture obtained~~ postcrosslinked,

~~m) drying the reaction mixture obtained directly or obtained from l), and~~

~~n) optionally grinding and/or sieving the reaction mixture obtained directly or obtained from l) or m)~~.

27. (Cancelled)

28. (Currently amended) The crosslinked hydrogel ~~according to any~~ of ~~claims~~ claim ~~20,~~ 21~~, 22 or 26~~ which has a residual crosslinker content of less than 10 ppm~~, preferably less than 8 ppm and more preferably less than 5 ppm~~.

29. (Cancelled)

30. (Cancelled)

31. (New) The mixture of claim 2 having a WFR between 250 and 350 g/mol of double bond.

32. (New) The mixture of claim 3 wherein n is 2.

33. (New) The mixture of claim 4 wherein the MW/Z ratios of two compounds differ by at least 100 g/mol of double bond.

34. (New) The mixture of claim 5 wherein one compound has an MW/Z ratio of below 300 g/mol of double bond.

35. (New) The mixture of claim 6 wherein one compound has an MW/Z ratio of above 600 g/mol of double bond and below 1000 g/mol of double bond.

36. (New) The mixture of claim 10 wherein AO is independently at each instance EO or PO,

wherein EO is O-CH2-CH2-,

PO is independently O-CH2-CH(CH3)- or O-CH(CH3)-CH2-

R5 and R6 are independently H or CH3.

37. (New) The method of claim 13 wherein said mixture of esters F_i have a WFR from 200 to 600 g/mol of double bond.

38. (New) A polymer prepared according to the process of claim 19.

39. (New) An article comprising a polymer prepared according to the method of claim 12.

40. (New) The article of claim 39 selected from the group consisting of a hygiene article, a packaging material, and a nonwoven.

41. (New) A method of absorbing aqueous fluids comprising contacting the fluid with a hydrogel-forming polymer crosslinked using an ester mixture of claim 1.

42. (New) The method of claim 41 wherein each ester is present in an amount of less than 2% by weight, based on the total amount of monomer.